



FILED

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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In the Matter of the Application of Pacific Gas and Electric Company for Approval of its Electric Vehicle Infrastructure and Education Program (U39E).

Application 15-02-009
(Filed February 9, 2015)

**ADMINISTRATIVE LAW JUDGE'S RULING SETTING FORTH QUESTIONS
FOR PACIFIC GAS AND ELECTRIC COMPANY AND THE JOINT SETTling
PARTIES**

This Ruling directs the Pacific Gas & Electric Company (PG&E), in consultation with the Joint Settling Parties, to serve answers to the questions set forth in Attachment 1 hereto, on all parties, within two weeks of this ruling being issued. Parties may serve replies within ten days of the responsive answers being served.

The purpose of this Ruling is to obtain greater detail from PG&E and the Joint Settling Parties' on their response to questions posed by the Administrative Law Judge's Ruling on April 4, 2016. The additional information is necessary to resolve technical questions about the iChargeForward pilot that remain after PG&E's prior response or that were raised during evidentiary hearings.

1. Pacific Gas & Electric Company, in consultation with the Joint Settling Parties, shall serve all parties with answers to the questions contained in Attachment 1 (*see below*) within two weeks of this ruling being issued.

2. Parties to this proceeding may file responses to Pacific Gas and Electric Company's (PG&E) answers within one week of PG&E's service of its responses.

IT IS SO RULED.

Dated July 7, 2016, at San Francisco, California.

/s/ DARWIN E. FARRAR

Darwin E. Farrar
Administrative Law Judge

Attachment 1

1. Please submit all prepared summary and analytical reports, including interim findings, related to the iChargeForward program that have been completed as of this date by the Pacific Gas and Electric Company (PG&E) or its contractors under the Demand Response pilot authorized in Decision D.12-04-045 and Advice Letter 4077-E. Please exclude or redact confidential, proprietary, and customer participant's personally-identifiable information in your response.
2. Please provide a brief background detailing:
 - a. The structure of the program.
 - b. What equipment involved in the program was PG&E-owned, third-party owned, or customer owned.
3. Per PG&E's research and analysis thus far, how would it characterize the potential for electric vehicles to curtail loads in response to demand response signals or initiate loads under a "load management program? Initial and tentative results are permissible. Also, please answer the questions below.
 - a. What is the reliability and response of managed EV charging to provide grid services, via day-ahead and real-time applications? What is the capacity, duration, and amount of grid services that can be provided via managed charging and the use of second-life EV batteries as stationary storage? Please address the following issues in your response:
 - i. What is the per-vehicle capacity for demand response under this program?
What is the share of EV curtailed load compared to stationary storage-based discharging or curtailed load, and how has it changed over time?
 - ii. What percent of curtailment requests were not satisfied, in terms of events and total demand response capacity requested?
 - iii. Does demand response capacity substantively vary by certain common customer traits (e.g. their existing residential rate, commute pattern, availability of workplace charging, etc.)?
 - iv. What is the responsiveness (latency) of the communications system being used under the program? Has latency changed over time? How reliable has the system been in responding to PG&E's curtailment requests?
 - v. Other than demand response, what other grid services might be appropriate for electric vehicle charging given the system deployed, given the behaviors that PG&E observed and the current technical requirements for those services?
 - vi. What are the segments of customers that PG&E will be applying these lessons learned toward in developing a Smart Charging program under the proposed Charge Smart and Save Settlement? Why? Will the Smart Charging program be irrelevant to Fast Charging situations?

- b. Customer interactions.
 - i. How was the program marketed and communicated to customers in order to induce enrollment? How many customers enrolled and how many have remained in the program?
 - ii. What are the primary motivators for customer enrollment and participation?
 - iii. What were the structure and roles of the incentive in garnering initial participation, and continued engagement?
 - iv. What are the types and frequency of communications with customers to request charging curtailments, provide information, or solicit feedback?
 - v. Have customers been satisfied with the program? How so?
 - vi. Please provide indicative types of feedback from customers, including their perception of and experience with the program, positive or negative. What is the overall sentiment from customers thus far?
- 4. Please provide any additional information not provided in response to the above questions that describes the progress and initial results of the program.

(END OF ATTACHMENT 1)